

What is claimed is;

1. An image read-out apparatus comprising a reading
light projecting means which projects reading light in a
line-like pattern extending in a main scanning direction onto
5 an image-bearing medium bearing thereon image information, an
image-bearing light detecting means having a line sensor which
extends along the line-like portion of the image-bearing
medium exposed to the reading light to receive image-bearing
light emitted from the portion exposed to the reading light
10 and converts the amount of image-bearing light to an electric
signal, and a sub-scanning means which moves one of the
image-bearing light detecting means and the image-bearing
medium relatively to each other in a sub-scanning direction
intersecting the main scanning direction, wherein the
15 improvement comprises that

the image-bearing light detecting means further
comprises an erecting unit optical system which is disposed
along the portion of the image-bearing medium exposed to the
reading and focuses the image-bearing light on the line sensor
20 and an optical element array formed by a plurality of first
and second optical elements which are alternately arranged
along the erecting unit optical system and lead the
image-bearing light passing through the erecting unit optical
system in different directions, and

25 said line sensor comprises a first sensor which receives
light led by the first optical elements and a second sensor

which receives light led by the second optical elements.

2. An image information read-out apparatus as defined in Claim 1 in which the image-bearing medium is a stimuable phosphor sheet on which radiation image information has been stored, and the image-bearing light is stimulated emission.

3. An image information read-out apparatus as defined in Claim 1 in which the stimuable phosphor sheet is anisotropic and radiates the stimulated emission in a direction at a predetermined angle to the direction of thickness of the stimuable phosphor sheet, and the image-bearing light detecting system is arranged so that the stimulated emission incident face of the erecting unit optical system is positioned in perpendicular to the direction at the predetermined angle to the direction of thickness of the stimuable phosphor sheet.

4. An image information read-out apparatus as defined in Claim 1 in which the image-bearing medium bears thereon a fluorescent material image.

5. An image information read-out apparatus as defined in Claim 1 in which each of the first and second sensors is provided with effective areas, where the sensor can detect light, and noneffective areas, where the sensor cannot detect light, which are alternately arranged in the main scanning direction, and the part of the image-bearing light led by the first optical elements is caused to impinge upon the effective areas of the first sensor and the part of the image-bearing light led by the second optical elements is caused to impinge

upon the effective areas of the second sensor.

6. An image information read-out apparatus as defined in Claim 1 in which the first and second sensors are disposed so that the effective areas of the first and second sensors overlap each other in the main scanning direction at portions corresponding to boundaries between the first and second optical elements of the optical element array and there is provided pixel signal adder means which adds up pixel by pixel outputs of the first and second sensors for each pixel in the portions corresponding to boundaries between the first and second optical elements of the optical element array.

7. An image information read-out apparatus as defined in Claim 1 in which the first optical elements of the optical element array transmits the image-bearing light and each of the second optical elements has a reflecting surface which reflects the image-bearing light.

8. An image information read-out apparatus as defined in Claim 1 in which each of the first optical elements has a reflecting surface which reflects the image-bearing light in a first direction, and each of the second optical elements has a reflecting surface which reflects the image-bearing light in a second direction different from the first direction.

9. An image information read-out apparatus as defined in Claim 1 in which the optical element array has a function of cutting the reading light.

10. An image information read-out apparatus as defined

in Claim 7 in which said reflecting surface transmits the reading light.

11. An image information read-out apparatus as defined in Claim 1 provided with a plurality of sets of image-bearing
5 light detecting means.

12. An image information read-out apparatus as defined in Claim 11 in which the boundaries between first and second optical elements are positioned in different positions, image-bearing light detecting means by image-bearing light
10 detecting means as seen in the main scanning direction.